

What is claimed is:

1. A film forming method comprising steps of:
discharging a liquid material in a form of liquid droplets;
impacting the liquid droplets on a substrate at a predetermined pitch; and
forming a film on the substrate,
the predetermined pitch determined based on a diameter of the liquid droplets after impact of the liquid droplets on the substrate.
2. The film forming method according to claim 1, wherein the predetermined pitch is roughly equal to the diameter of the liquid droplets after impact.
3. The film forming method according to claim 1, wherein the liquid material is a material forming an alignment film.
4. The film forming method according to claim 3, wherein the liquid material has a viscosity of 2.0 mPa's to 20 mPa's.
5. The film forming method according to claim 3, wherein the liquid material has a surface tension of 20 mN/m to 70 mN/m.
6. The film forming method according to claim 1, wherein the substrate comprises a plurality of pixel regions arranged thereon, and the liquid droplets are impacted at a center of each of the plurality of pixel regions.
7. The film forming method according to claim 6, wherein the diameter of the liquid droplets after impact is roughly equal to an arrangement pitch of the plurality of pixel regions.
8. The film forming method according to claim 1, comprising a lyophilic treatment step for treating a surface of the substrate to be lyophilic with respect to the liquid material before forming a film.
9. A film forming device comprising:
a discharge head which discharges a liquid material in a form of liquid droplets and impacts the liquid droplets on a substrate at a predetermined pitch to form a coated film on the substrate,
the predetermined pitch determined based on a diameter of the liquid droplets after impact of the liquid droplets on the substrate.
10. The film forming device according to claim 9, wherein the predetermined pitch is roughly equal to the diameter of the liquid droplets after impact.
11. The film forming device according to claim 9, comprising:

a nozzle for discharging the liquid material in the form of liquid droplets on the discharge head,

a surface of a periphery of the nozzle on the discharge head treated so as to have a predetermined contact angle with respect to the liquid material.

12. The film forming device according to claim 11, wherein the predetermined contact angle is 30° to 170°.

13. The film forming device according to claim 11, comprising:

a plurality of pixel regions arranged on the substrate, and

a drive system for moving the nozzle and the substrate relative to each other and aligning each impact location of the liquid droplets with each location of the pixel regions.

14. A liquid crystal device comprising an alignment film provided using a film forming device according to claim 1.

15. An electronic device comprising a liquid crystal device according to claim 14.

16. A liquid crystal arrangement method for discharging liquid crystal from a discharge unit to arrange the liquid crystal on a substrate, in which the discharge unit comprises a plurality of nozzles for discharging the liquid crystal in a form of liquid droplets, comprising: determining an arrangement pitch of the liquid droplets on the substrate based on a diameter of the liquid droplets after impact of the liquid droplets on the substrate.

17. The liquid crystal arrangement method according to claim 16, wherein the arrangement pitch of the liquid droplets is roughly equal to the diameter of the liquid droplets after impact.

18. The liquid crystal arrangement method according to claim 16, in which a plurality of pixel regions composed of a plurality of pixels are formed on the substrate, comprising: coating the liquid droplets onto each of the plurality of pixel regions.

19. The liquid crystal arrangement method according to claim 18, wherein the diameter of the liquid droplets after impact is roughly equal to the arrangement pitch of the plurality of pixel regions.

20. A liquid crystal arrangement device comprising:

a discharge unit for discharging liquid crystal to arrange the liquid crystal on a substrate,

the discharge unit comprising a plurality of nozzles which discharge liquid crystal in a form of liquid droplets, and an interval between the plurality of nozzles is determined based on a diameter of the liquid droplets after impact of the liquid droplets on the substrate.

21. The liquid crystal arrangement device according to claim 20, wherein the interval between the plurality of nozzles is roughly equal to the diameter of the liquid droplets after impact.
22. The liquid crystal arrangement device according to claim 20, comprising:
 - a plurality of pixel regions arranged on the substrate, and
 - a drive system for moving the nozzle and the substrate relative to each other and aligning each impact location of the liquid droplets with each location of the pixel regions.
23. A liquid crystal device comprising liquid crystal arranged using a liquid crystal arrangement device according to claim 20.
24. An electronic device comprising a liquid crystal device according to claim 23.
25. A liquid crystal device production method comprising:
 - forming an alignment film on a substrate by an ink jet process; and
 - coating liquid crystal onto the substrate on which the alignment film is formed by the ink jet process.
26. A liquid crystal device production method comprising:
 - forming a color filter on a substrate by an ink jet process;
 - forming an alignment film on the substrate on which the color filter is formed by the ink jet process; and
 - forming liquid crystal on one of a pair of substrates by the ink jet process so as to form therebetween.